

WidePak™ Deep Gas-Lift System

Increases Production of Offshore Oil Well by More Than 500%

Objectives

- Increase drawdown in a mature oil well with 78% water cut. The well was completed with dual tubing strings and a gas-lift injection valve in 1994. Production had declined significantly in recent years, which prompted the operator to engage production testing. A gradient survey showed a low drawdown and indicated that the well had greater production potential.

Our Approach

- Weatherford thru-tubing services installed the WidePak deep gas-lift (DGL) system at a depth of 2,504 ft (763 m) using 1.5-in. coiled tubing. To optimize production, the team placed the DGL system so that it straddled the deepest side-pocket mandrel.
- The team extended the DGL system to a depth of 3,667 ft (1,118 m).
- The operator did not have to suspend production during the 3-day installation.
- With the DGL system in place, injection pressure reached 870 psi (6,000 kPa) and drawdown doubled.

Value to Customer

- Oil production increased by more than 500%, from 56 to 289 B/d (9 to 46 m³/d)—a net gain of 233 B/d (37 m³/d)
- By installing the DGL system using tubing instead of a workover rig, Weatherford saved the operator approximately \$5 million in rig time and associated expenses.
- Nearby wells did not need to be shut in during the intervention, which presented additional value to the customer.



The WidePak DGL system has varied deployment options that enable operators to choose the most cost-effective conveyance method based on the application.

LOCATION

Brunei

WELL TYPE

Offshore, oil producer

TUBING SIZE AND TYPE

3-1/2 in., 9.2 lb/ft

INJECTION STRING

1,122 ft (342 m) of 1.5-in. coiled tubing

CASING SIZE AND TYPE

[Important casing information]

TOTAL WELL DEPTH

4,577 ft (763 m)

INSTALLATION DEPTH

2,504 ft (763 m)

PRODUCTS/SERVICES

- WidePak deep gas-lift system

